

A CLINICAL FIELD TRIAL TO DETERMINE:

**The Efficacy of Oxytetracycline-Medicated Feed to Control Mortality of Juvenile Steelhead Trout *Oncorhynchus mykiss* caused by Columnaris, (Causative Agent *Flavobacterium columnare*), - Study #01.**

**ORIGINAL**

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Study Number: BOZ-98-OTF Study #1

Study start date: June 20, 1998

Study end date: July 13, 1998

Date report submitted to CVM: June 12, 2000

## Abstract

A study was conducted at the Coleman National Fish Hatchery (Anderson, California) to evaluate the efficacy of oxytetracycline-medicated feed (OTF) to control mortality of juvenile steelhead trout *Oncorhynchus mykiss* infected with systemic columnaris. Six test tanks, each holding approximately 2,900 test fish, were used in the study. Fish in three of the test tanks were fed OTF at a target dosage of 3.75 g active drug/100 lbs of fish/d for 10 consecutive days. In the other three test tanks, fish were fed unmedicated feed and thus served as untreated controls. Each 10-d feeding regimen was followed by a 10-d post-treatment observation period. Fish used in the study were diagnosed with columnaris (causative agent *Flavobacterium columnare*) based on examination of inoculum from fish spleen streaked on Brain Heart Infusion Agar and Tryptone-Yeast Extract Agar. Mean cumulative mortality during the combined treatment and post-treatment periods was significantly lower ( $P < .001$ ) in treated tanks (310 fish; 13.4%) than that in untreated tanks (684 fish; 28.8%). Results from this study demonstrated that the OTF treatment regimen used was efficacious in controlling mortality of juvenile steelhead trout caused by systemic columnaris.